

CLAIMS

What is claimed is:

- 5 1. A banded billing method for telecommunication services comprising:
- maintaining in data storage a banded-pricing schedule that divides a continuum of minutes of use into a series of contiguous, mutually-exclusive minute-ranges and that specifies for each minute-range a respective cost;
- determining a number of minutes of telecommunication service that were used by a given
- 10 subscriber during a given period;
- querying the banded-pricing schedule to determine which minute-range the number of minutes falls into, and to determine the cost specified by the banded-pricing schedule for that minute-range; and
- billing the determined cost to the given subscriber, for use of the telecommunication
- 15 service during the given period.
2. The banded billing method of claim 1, wherein each of a plurality of the minute-ranges defined by the banded-pricing schedule spans a plurality of minutes.
- 20 3. The banded billing method of claim 1, wherein each of the minute-ranges defined by the banded pricing schedule spans a plurality of minutes.

4. The banded billing method of claim 1, wherein the series of minute-ranges begins with a first minute-range of 0 to P minutes, and then continues with minute-ranges R_k , each extending from $\{P + (k-1)(Q) + 1\}$ minutes to $\{P + (k)(Q)\}$ minutes, wherein $k = 1, 2, 3, \dots, N$, and wherein Q is a number of minutes.

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5. The banded billing method of claim 4, wherein $P = 300$, and wherein $Q = 25$.

6. The banded billing method of claim 5, wherein $N = 14$.

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7. The banded billing method of claim 4, wherein:

the cost that the banded-pricing schedule specifies for the first minute-range is C, and

the cost that the banded-pricing schedule specifies for each subsequent minute-range R_k

is $C + (k)(G)$, wherein G is an incremental cost.

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8. The banded billing method of claim 7, wherein $G = \$2.50$.

9. The banded billing method of claim 4, wherein, after N minute-ranges following the first minute-range, the series of minute-ranges continues with minute-ranges R_j , each extending from $\{P + (N)(Q) + (j-1)(T) + 1\}$ minutes to $\{P + (N)(Q) + (j)(T)\}$ minutes, wherein

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$j = 1, 2, 3, \dots, M$, and wherein T is a number of minutes greater than Q.

10. The banded billing method of claim 9, wherein $T = 50$.

11. The banded billing method of claim 9, wherein:

the cost that the banded-pricing schedule specifies for the first minute-range is C,

the cost that the banded-pricing schedule specifies for each subsequent minute-range R_k

is $C + (k)(G)$, wherein G is an incremental cost, and

5 the cost that the banded-pricing schedule specifies for each subsequent minute-range R_j is
 $C + (N)(G) + (j)(G)$.

12. The banded billing method of claim 4, wherein, after N minute-ranges following

the first minute-range, the series of minute-ranges continues with minute-ranges R_j , each

10 extending from $\{P + (N)(Q) + (j-1)(Q) + 1\}$ minutes to $\{P + (N)(Q) + (j)(Q)\}$ minutes, wherein

$j = 1, 2, 3, \dots, M$, and wherein:

the cost that the banded-pricing schedule specifies for the first minute-range is C,

the cost that the banded-pricing schedule specifies for each subsequent minute-range R_k

is $C + (k)(G)$, wherein G is an incremental cost, and

15 the cost that the banded-pricing schedule specifies for each subsequent minute-range R_j is
 $C + (N)(H) + (j)(H)$, wherein H is an incremental cost less than G.

13. The banded billing method of claim 12, wherein H is half of G.

20 14. The banded billing method of claim 1, wherein the telecommunication service
comprises wireless telecommunication service.

15. The banded billing method of claim 1, wherein the telecommunication service comprises voice telecommunication service.

16. The banded billing method of claim 1, wherein the telecommunication service
5 comprises data telecommunication service.

17. The banded billing method of claim 1, wherein determining the number of minutes of telecommunication service that were used by the given subscriber in the given period comprises extracting usage data from call detail records generated by one or more
10 telecommunication switches.

18. The banded billing method of claim 1, wherein the given period is a month.

19. The banded billing method of claim 1, further comprising:
15 treating as a minute of use any partial minute used at a conclusion of a communication session.

20. The banded billing method of claim 1, wherein billing the determined cost to the subscriber comprises recording the cost in a subscriber account record.

21. The banded billing method of claim 1, wherein billing the determined cost to the given subscriber comprises generating and sending to the given subscriber an invoice indicating the determined cost.

22. A banded billing system for telecommunication services comprising:

data storage;

reference data stored in the data storage, wherein the reference data defines a banded-

5 pricing schedule that divides a continuum of minutes of use into a series of contiguous, mutually-exclusive minute-ranges and that specifies for each minute-range a respective cost;

usage program logic stored in the data storage and executable to determine a number of minutes of telecommunication service that were used by a given subscriber in a given period; and

10 pricing program logic stored in the data storage and executable to query the banded-pricing schedule so as (i) to determine which minute-range the number of minutes falls into and (ii) to determine the cost specified by the banded-pricing schedule for that minute-range,

whereby the banded billing system executes the usage program logic to determine the number of minutes used by the given subscriber in the given period and executes the pricing
15 program logic to determine a cost to charge for that number of minutes, and whereby the banded billing system then charges the determined cost to the given subscriber.

23. The banded billing system of claim 22, wherein the usage program logic is executable to receive and process call detail records and to extract usage information from the
20 call detail records.

24. The banded billing system of claim 22, wherein the call detail records are generated by one or more telecommunication switches.

25. The banded billing system of claim 22, wherein the telecommunication service comprises wireless telecommunication service.

5 26. The banded billing system of claim 22, wherein the telecommunication service comprises voice telecommunication service.

27. The banded billing system of claim 22, wherein the telecommunication service comprises data telecommunication service.

10 28. A banded billing method for telecommunication services comprising:
maintaining in data storage a banded-pricing schedule that divides a continuum of increments of use into a series of contiguous, mutually-exclusive increment-ranges and that specifies for each increment-range a respective cost;

15 determining a number of increments of telecommunication service that were used by a given subscriber during a given period;

querying the banded-pricing schedule to determine which increment-range the number of increments falls into, and to determine the cost specified by the banded-pricing schedule for that increment-range; and

20 billing the determined cost to the given subscriber, for use of the telecommunication service during the given period.

29. The banded billing method of claim 28, wherein each of the increment-ranges defined by the banded pricing schedule spans a plurality of increments.

30. The banded billing method of claim 28, wherein the telecommunication service
5 comprises wireless telecommunication service.